

CLAIMS

1. A catalytic muffler comprising:

a housing having a first chamber, and a second chamber fluidly communicating through a catalyst bed interspersed therebetween;

5 a first baffle assembly in said first chamber extending between said catalyst bed and said housing;

an inlet passage extending through said housing into said first chamber;

an outlet passage extending through said housing into one of said first chamber and said second chamber;

10 a second baffle assembly in said second chamber extending between said catalyst bed and said housing;

said first and second baffle assemblies acting in conjunction with said housing and said reactor bed to define a flow passage through said housing from said inlet passage through at least three discreet zones of said reactor bed to said outlet passage.

15
2. A catalytic converter as claimed in Claim 1 wherein:

one of said inlet and said outlet passages extends through an end of said housing;

20 the other of said inlet and said outlet passages extends through a side of said housing.

TOP SECRET//GPO

3. A catalytic converter as claimed in Claim 1 wherein:

 said inlet and said outlet passages extend through a side of said housing.

5 4. A catalytic converter as claimed in Claim 2 wherein:

 said inlet and outlet passages extend through an end of said housing.

5. A catalytic converter as claimed in Claims 2, 3 or 4 wherein:

 said housing is cylindrical.

10

6. A catalytic converter as claimed in Claims 2, 3 or 4 wherein:

 said reactor bed includes an oxidizing catalyst in one part thereof and a reducing catalyst in another part thereof.

15

7. A catalytic converter as claimed in Claim 6 wherein:

 said housing is cylindrical.

20

8. A catalytic converter as claimed in Claim 4 wherein:

 said inlet passage extends into said first chamber;

 said outlet passage extends through said second end of said housing.

TOKU-2009-022976-260

9. A catalytic muffler as claimed in Claim 8 wherein said reactor bed includes an oxidizing bed as one part thereof and a reducing bed in another part thereof.

5 10. A catalytic muffler as claimed in Claim 9 wherein:
said reducing bed is upstream of said oxidizing bed.

11. A catalytic muffler as claimed in Claim 10 wherein:
said housing is cylindrical.

10 12. A catalytic muffler as claimed in Claim 6 wherein:
said reducing bed is upstream of said oxidizing bed.

13. A catalytic muffler as claimed in Claim 12 wherein:
15 said housing is cylindrical.

14. A catalytic muffler as claimed in Claim 1 or 2 wherein:
said housing is cylindrical and defined by cup shaped first and second
parts joined at respective outer edges; and,
20 said first and second baffle members act as spacers to locate said
reactor bed within said housing.

PROVISIONAL

15. A catalytic muffler as claimed in Claim 1 or 2 wherein:

 said housing is cylindrical and made up of cup shaped first and second parts, joined at respective outer edges to respective ends of a sleeve; and,

 said first and second baffle assemblies act as spacers to located said
5 reactor bed within said housing.